* NOTICES *

1. This document has been translated by computer.So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]
[Claim 1] The resin-seal surface mount type semiconductor device with which the rear-face section of the internal derivation lead to which the aforementioned internal wiring is connected is characterized by the external electrode and bird clapper at the time of mounting a direct semiconductor device in the resin-seal surface mount type semiconductor device which carries a semiconductor device, wires an internal derivation lead in the electrode on the front face of an element, and comes to carry out the resin seal of the wiring section and the aforementioned semiconductor device section.
[Claim 2] The resin-seal surface mount type semiconductor device according to claim 1 characterized by the rear face of a semiconductor device being exposed to the outside of a semiconductor device through resin material other than a direct or closure resin.
[Claim 3] The resin-seal surface mount type semiconductor device according to claim 1 characterized by forming more highly one step than the field of an external electrode the field through the rear-face section of a semiconductor device, or resin material other than a closure resin.

[Translation done.]

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 05-129473
(43)Date of publication of application : 25.05.1993

(51)Int.CI. H01L 23/28
H01L 23/12
H01L 23/50

(21)Application number : 03-289882
(22)Date of filing : 06.11.1991

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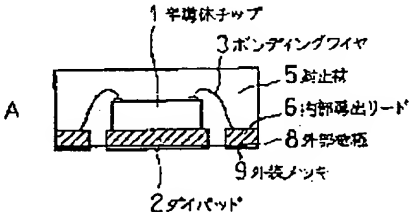
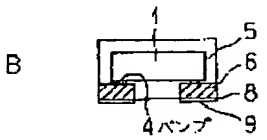
(72)Inventor : FUKAZAWA HIROYUKI

(54) RESIN-SEALED SURFACE-MOUNTING SEMICONDUCTOR DEVICE

(57)Abstract:
PURPOSE: To reduce the size and thickness of the title semiconductor device while a mechanism which prevents the deformation of external electrodes or fluctuation of the electrodes at the machining time is secured by using the rear sections of inner leads connected to internal wiring as external electrodes at the time of directly mounting the semiconductor device.



CONSTITUTION: A semiconductor chip 1 is placed on the die pad 2 of a lead frame. After electrically connecting the chip 1 to inner leads 6, the rear of which become external electrodes 8, through bonding wires 3, the upper part is sealed with a resin. Similarly, the chip 1 is electrically connected to the leads through bumps 4. In other words, the rear of the electrically connected inner leads 6 are used as the electrical connecting sections 8 of the semiconductor device to the outside. Therefore, the size of the semiconductor device can be reduced to nearly the same size as that of the chip 1. In addition, the thickness of the semiconductor device can also be reduced.



LEGAL STATUS

[Date of request for examination]	28.10.1998
[Date of sending the examiner's decision of rejection]	30.11.1999
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]	
[Date of final disposal for application]	
[Patent number]	
[Date of registration]	
[Number of appeal against examiner's decision of rejection]	
[Date of requesting appeal against examiner's decision of rejection]	
[Date of extinction of right]	

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★SONY U11 93-202142/25 ★JP05129473-A

Mould package flat-face mounting type semiconductor device - exposes bottom surfaces of die pad and inner leads of bottom surface of mould package semiconductor device to be directly connected to circuit pattern of PCB NoAbstract

SONY CORP 91.11.06 91JP-289882

(93.05.25) H01L 23/28, 23/12, 23/28, 23/50

(6pp Dwg.No.1/13)

N93-155203 **U11-D01A3 U11-D03A9**